



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/087,092 | 03/01/2002 | Anthony C. Bonora | 34741-774 | 1981 |
| 33864 | 7590 | 07/29/2004 | EXAMINER | |
| O'MELVENY & MYERS, LLP 275 BATTERY STREET SUITE 2600 SAN FRANCISCO, CA 94111-3305 | | | | FOX, CHARLES A |
| ART UNIT | | PAPER NUMBER | | |
| 3652 | | | | |

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/087,092 | BONORA ET AL. <i>J</i> |
| | Examiner | Art Unit |
| | Charles A. Fox | 3652 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(h).

Status

1) Responsive to communication(s) filed on 09 April 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,2,4,8-10,13 and 15-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,2,4,8-10,13 and 15-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 30 July 2002 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

Drawings

The drawings are objected to because figures 1-3 are not labeled as prior art.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,8,10,13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonora in view of Bacchi et al. and further in view of the admitted prior art. In regards to claims 1,8 and 13 Bonora et al. US 6,138,721 teach a system for transferring wafers comprising:

a unified frame, including at least 2 vertical struts spaced apart and mounted to an upper and a lower support member, said frame defining at least one input/output port and a port door storage area; see figure 2.

a carrier docking isolation plate (10) mounted to each vertical strut;
a carrier advance assembly (13) for supporting a wafer carrier, and moving a wafer carrier towards and away from said carrier docking isolation plate;

a port door assembly (15) and a drive mechanism for engaging and mating with a wafer carrier door and moving said door into and out of a storage area.

Bonora et al. do not teach a wafer handling robot connected to the frame assembly or a separate storage compartment for the port door/carrier door assembly when opened. Bacchi et al. teach a wafer handling system comprising :

a frame (12) for supporting a plate (18);
a port door (17) in said plate;
a wafer carrier stage connected to a first side of said plate;
a wafer handling robot (20) connected to said frame (12) for moving wafers into and out of said wafer carrier. Bacchi et al. do not teach a separate storage compartment for the port door/carrier door assembly when opened.

The admitted prior art shown in figure 3 clearly shows a separate storage compartment for a port door/ carrier door assembly. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide a wafer handling robot as taught by Bacchi et al. in the device taught by Bonora et al. in order to allow the device to move wafer without having to depend on the host process device to have a wafer handler, thereby allowing the device to work with a wide range of existing process machines, and to further place the port door assembly in a separate compartment as taught by the admitted prior art as this is a conventional arrangement that would have been well know to one of ordinary skill in the art.

In regards to claims 2,9 and 16 the admitted prior art further teaches a drive and guides for moving a port door/ carrier door assembly from a closed position to a storage position. See page 26 lines 5-7 of the specification of the instant invention. Therefore It would have been obvious to one of ordinary skill in the art, at the time of invention to further provide the device taught by Bonora in view of Bacchi et al. with well know means for handling a port door assembly in order to use existing parts, thereby decreasing the overall cost of manufacturing the device.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonora et al., Bacchi et al. and the admitted prior art as applied to claims 1 and 13 above, and further in view of Saeki et al. Bonora et al., Bacchi et al. and the admitted prior art teach the limitations of claims 1 and 13 as above, they do not teach the docking isolation plate as being transparent. Saeki et al. US 6,053,983 teaches making a wafer carrier from transparent material as a means for determining the contents of the carrier

and their condition. It would have been obvious to one of ordinary skill in the art, at the time of invention to use a transparent material as taught by Saeki et al. on the device taught by Bonora et al., Bacchi et al. and the admitted prior art in order to allow an operator to look into a particular area without having to compromise the environmental isolation of that area.

Response to Amendment

The amendment filed on April 9, 2004 has been entered into the record.

Response to Arguments

Applicant's arguments with respect to claims 1,8 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAF
CAF
7-19-04


EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600